

VERSION WITH MARKINGS TO SHOW CHANGES MADE



In the Claims

Claim 1 has been amended as follows:

1. (Amended) A [rotor] motor structure [of] having an inner rotor assembly [type motor], the motor structure comprising:

a stator including annular stator yokes each having a plurality of pole teeth along an inner circumference thereof and coils arranged inside said stator yokes, each coil being constructed by winding a magnet wire and

a rotor rotatably disposed with a small gap from said pole teeth of said annular yokes and having a permanent magnet arranged opposite to said pole teeth,

wherein said permanent magnet comprises a rare earth magnet further comprising a plurality of discrete segment magnets which are arranged apart from each other on an outer surface of the rotor with a thermoplastic material that fills a space between a rotor shaft and each segment magnet and a space between adjacent segment magnets [by resin molding].

Claim 2 has been amended as follows:

2. (Amended) A [rotor] motor structure according to claim 1, wherein each of said segment magnets has end surfaces in an axial direction of the rotor, an inner circumferential edge of which end surface is longer than an outer circumferential edge of said end surface.

Claim 3 has been amended as follows:

3. (Amended) A [rotor] motor structure according to claim 1, wherein said segment magnet has the end surfaces at least a part of the outer circumferential edge of which is provided with a chamfered portion or a stepped portion.

Claim 4 has been amended as follows:

4. (Amended) A [rotor] motor structure according

to claim 1, wherein recessed portions are provided on [the] circumferential sides of said segment magnets.

Claim 5 has been amended as follows:

5. (Amended) A [rotor] motor structure according to claim 1, wherein magnetization positioning means is provided on an axial end surface of the rotor for positioning magnetization orientation of said segment magnets.

Claim 6 has been amended as follows:

6. (Amended) A [rotor] motor structure according to claim 1, wherein said segment magnets comprise a rare earth magnet.

Claim 7 has been amended as follows:

7. (Amended) A [rotor] motor structure according to claim 1, wherein a thickness of said segment magnet is set to be equal to or smaller than one half of a rotor magnetic pole pitch.

Claim 11 has been amended as follows:

11. (Amended) A[n] motor having an inner rotor [type] assembly, the motor comprising:

a stator including annular stator yokes each having a plurality of pole teeth located along an inner circumference thereof and coils arranged inside said stator yokes, each coil being constructed by winding a magnet wire;

a rotor rotatably disposed adjacent said pole teeth of said annular yokes and having a permanent magnet arranged opposite said pole teeth; and,

wherein said permanent magnet comprises a rare earth magnet further comprising a plurality of discrete segment magnets which are spaced from each other on an outer surface of the rotor by a thermoplastic material that fills a space between a rotor shaft and each segment magnet and a space between adjacent segment magnets.